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Cryptozoology & Crop Circle Research

Two Further Fields of Investigation at a Glance

Gerhard Mayer & Michael Schetsche

In the following, two further fields of research in anomalistics will be mentioned in which field research-based single case studies can play a significant role from a methodological point of view. The purpose is not to give a sufficient overview of these areas of research but to look at some particularities of anomalistic research from a different angle and, thereby, further complete the picture. Cryptozoology and crop circle research are both areas in which lay researchers in particular are interested;[1] and both have a relatively close connection to RSPK and UFO investigations.

Cryptozoology

Cryptozoology is to be considered as a subdomain of zoology that deals with the scientific study of animal forms whose existence is based only on testimony or circumstantial evidence or on material that has been judged insufficient. Arment (2004: 9) gives the following definition:

> What is cryptozoology? In short, it is a targeted-search methodology for zoological discovery. Specifically, it is just one path by which the status of purported new or lost species may be resolved. Practically, it is a lengthy process of collecting and analyzing data to determine which mystery animals may be unknown biological species, and then searching for conclusive physical evidence.

Although there have been and still are controversies about the exact determination of the subject area, which have led to different classification systems (ibid.: 16–18), this is probably not the decisive reason why cryptozoology enjoys a dubious reputation from a scientific perspective or is partially denied recognition as a scientific discipline. The reason for this is rather the fact that the field has been heavily occupied by people who uncritically associate paranormal phenomena, mythical figures, and entities from other "realms of reality" (ghosts, vampires, werewolves, monsters, etc.) with cryptozoology. This has led, for example, to the entry in Wikipedia devaluating it as a pseudo-science:

1 In both fields, "scenes" have developed, which have their own communication platforms and journals and in which lay research plays a major role.

"Cryptozoology is a pseudoscience and subculture […] Because it does not follow the scientific method, cryptozoology is considered a pseudoscience by the academic world: it is neither a branch of zoology nor folkloristics".[2]

For the self-conception of a serious scientific cryptozoology it is therefore important to distinguish it from cultural studies (e. g. ethnological studies) and mythical creatures. Although these can be used as stimulating sources (e. g. for finding habitats of potential *cryptids*, as the unknown species are sometimes called), the actual research activity of cryptozoology can clearly be located in zoology/biology. In addition to extensive literature research, if necessary, the methodological procedure includes interviews with eyewitnesses and field investigations with data collection of various types (photo surveillance, footprints, hair samples), each of which requires special analytical procedures. A detailed description of cryptozoological research methodology can be found in Arment (2004: 95–127). An important difference from other sub-sciences of zoology/biology should also be noted: In cryptozoology—comparable with other areas of anomalistics—dealing with forgeries plays a comparatively large role. This concerns both reports of cryptids and emerging film and photographic documents or even material traces and parts of cryptids. The latter was, for instance, the case with a Bigfoot hoax in 2008 by Whitton and Dyer that caused a certain stir in the international press.[3] The Bigfoot hoax might be seen as a consequence (and part) of a mainly US-American development that has certain similarities with the ghost-hunting movement (see Bader, Mencken, & Baker, 2010: 100–128). In recent years, a considerable number of Bigfoot groups have formed that go "hunting for Bigfoot" at night, with high-tech equipment and the desire to provide definitive proof of Bigfoot's existence through audio, photo, and video recordings. The websites of such groups also are structurally similar to those of ghost-hunting groups,[4] and their activity is an attractive subject for TV documentaries, also astonishingly similar to those about ghost hunting groups with regard to their production style.

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2 https://en.wikipedia.org/wiki/Cryptozoology (accessed: October 26, 2018). This, however, is not a scientifically based argument, and reflects a problem with academic mainstream science well known in the field of anomalistics (see e. g. Hövelmann, 2015; Mayer & Schetsche, 2016).

3 cf. https://web.archive.org/web/20110926220325/http://www.wsbtv.com/news/17197939/detail.html and http://news.nationalgeographic.com/news/2008/08/080818-bigfoot-dna.html.

4 See, for instance, the website of *Oregon Bigfoot* providing a sighting database, photos, videos, sounds, books, DVDs etc. (http://www.oregonbigfoot.com/about.php – accessed: July 6, 2017).

Crop Circle Research

Crop circle research deals with the investigation of regular geometric patterns (mostly) in cornfields.[5] The first reports on circular patterns in grain fields date back to the end of the 16th century. But it was only in the course of the 1980s that a larger public became aware of the phenomenon of patterns soon to be called "crop circles", when the mass media increasingly reported them (Müller, 2001: 10–52; Thomas, 2002). In 1986, there was a qualitative leap in development as increasingly complex geometric shapes were discovered in fields. According to Müller (p. 16), the first scientific investigation of a crop circle formation was initiated by the British government in 1963; the research team at that time was led by the Australian astrophysicist Robert Randall. Since celestial and light phenomena in the context of the emergence of crop circles had already been reported at this time, a connection to the then virulent UFO topic was quickly established among the public—such an interpretation still exists today, even if it does not dominate.

The decisive questions in the investigation of these crop circles to this day are: Is it possible for humans (a) under the given conditions (time limitation, technical aids, spatial situation) to generate such complex geometric patterns without being detected, and (b) to bend the grain stalks in the way specific to crop circles? For those who consider these questions as not yet conclusively answered in the affirmative, the thus identified "genuine" crop circle phenomena represent anomalies. As already indicated in the last sentence, there are now known to be many fake crop circles, which can clearly be designated as human artefacts because of respective confessions, or due to particular structural characteristics. There is probably no other area in anomalistics where the question of forgeries builds so much of the focus of the examination. It is possible to construct reasonably plausible (conventional) hypotheses for the manifestation of simply shaped crop circles (geo-ecological causes, meteorological causes, etc.). However, skeptical investigation groups principally consider crop circle formation of a higher complexity as inevitably man-made, and thus certain forgeries. This shifts the perspective away from the phenomenon towards the groups of people involved. Accordingly, Hoos only distinguishes between the "scene of crop circle investigators" and the "scene of crop circle makers" and describes the "crop circles as a social event" (Hoos, 2004: 111).

This may well be apt in some respects, but with such a strongly defined position the spectrum of investigative questions is unacceptably reduced from the point of view of anomalistics. For those crop circle researchers who consider the possibility of an anomaly, and for this reason only study the phenomena judged worth investigating at all, the

5 For a concise overview in German see Haselhoff (2015).

extremely unfortunate situation arises in which the phenomenon area is permanently and deliberately "contaminated" with forgeries—by whomever and for whatever motive. The basic problem of a crop circle investigation is therefore generally to check the "genuineness" of the incident. Since it is one of the concerns of some "crop circle skeptics" to deceive the "crop circle anomalists" by creating patterns that appear as "genuine" as possible and thus to prove that their judgements cannot be taken seriously in the critical ("genuine") cases, a situation of great distrust arises. However, the "scene of crop circle makers" does not only consist of "crop circle skeptics", but crop circle patterns are also produced by people who are looking for the fun and thrill of a forbidden nighttime action—comparable in some respects to the graffiti artists who spray their pictures on subway trains and house walls during the night hours under the protection of darkness. In addition, false claims of responsibility are conceivable: Someone proclaims his authorship for a particularly successful work, although he or she has nothing to do with the creation. Here, too, different motivations are conceivable. This makes the situation even more confusing for the serious researcher.

The result of an investigation often consists of a plausibility assessment of how likely the phenomena are to be based on an anomaly. In addition to the described problems that a crop circle researcher faces, namely the permanent danger of becoming the victim of forgery activities from the "crop circle makers" camp, he also enjoys advantages over investigators in other areas of anomalistics: The phenomena to be investigated have a relatively long temporal stability. Since the crop circles are thus "almost permanent" anomalies, they can be very well documented and investigated with much "harder" methods than many other anomalies. Therefore, one finds a strong scientific orientation in the investigation methodology. Nevertheless, plausibility considerations are also important here, as it is not always possible to carry out complex analyses and the phenomenology may not be as homogeneous as one would like it to be.

Data collection is methodically relatively simple, although expensive with regard to the resources used (travel expenses, capturing aerial images).[6] For adequate data evaluation in critical cases, however, external expertise is required to carry out laboratory tests. Although plant and soil investigations are the best way to detect material (physical) anomalies, other indicators are also considered, such as the malfunction of technical equipment, photographic anomalies, strange animal behavior, etc. For this purpose, interviews with potential witnesses are conducted. The formations themselves are also analyzed for formal characteristics (geometry, shape relationships,

6 See the guideline for data gathering and documentation by Müller (2001: 138–139). With the development of quadcopters with cameras, which are relatively inexpensive and easily to handle, the situation has changed regarding aerial images.

etc.) in order to obtain indications about lineages and potential authorship, as the case may be.

In many cases, the worldview component is rather subordinated, since the emergence of these formations (at least of the relatively simple forms) does not necessarily require the thesis of a causative intelligence (meteorite tail thesis and the like—see Müller 2001: 99 and 126–135). However, the more complex and emblematic the forms become, the more virulent the thesis of intelligent causation becomes—be it through simple forgery, be it through an unknown intelligence-led method.[7]

The patterns should be neither too simple nor too complex. If other characteristics (e. g. accuracy, condition of the stems) fit, the probability increases that they are considered genuine, i. e. as anomalies, by plausibility assessments. In the case of very complex geometric forms, explanations which are more easily compatible with natural laws, such as electrically charged, highly energetic air vortices or ball lightning, can no longer be plausibly applied. If one accepts the anomalistic interpretation, one has here to draw on the causation by an intelligent force of unknown nature. Alternatively, a kind of PK explanation is proposed that hypothesizes an interaction of the human mind and natural processes in a paranormal way.

The two areas of anomalistic field research outlined here, cryptozoology and crop circle research, allow some of the basic conditions of anomalistics from the edges of the border areas to be shown. The fact that in both cases we are dealing with *physically* manifested objects, which therefore can be examined with conventional methods of the natural sciences, makes the question of the justification of an *anomalistic* character virulent.

This is most evident in cryptozoology: here one finds the paradoxical situation that it is precisely the reference to mythical figures and entities with unclear ontological status, such as werewolves, monsters, etc., that justifies the designation of this subfield of zoology as a separate field of research—from which "serious cryptozoology" vehemently tries to distance itself. This is because when a herpetologist discovers a new, previously unknown species of frog during his field research, it is a remarkable but nevertheless "normal" process within the scope of his activity. And the fact that marine biologists have recently discovered a large number of hitherto unknown animal species in their inventory of the living environment of the oceans[8] has not yet made them cryptozoologists. Two significant characteristics of cryptozoology can often be found: an interest in *relatively large* animals, by tendency, or in those that are arranged outside the existing classification

7 Various hypotheses of sources of crop circles are discussed by Thomas (2002: 143–165).

8 http://www.coml.org/

system or *considered extinct*. The aspect of the largeness of the creatures searched for gives the lack of a prior detection accompanied by clear physical evidence of their existence an anomalistic character (it is simply reasonable and acceptable that small species of frogs or insects are overlooked, whereas it is hard to imagine, considering today's human pervasion of the earthly habitats, that larger animals should be capable of eluding the human gaze which is supported by the use of multiple technical aids); the same applies for creatures which push the boundaries of the existing classification schemes or are considered long extinct.

With these characteristics, the *predictability* of a discovery plays a decisive role. Another important point is that it is a targeted search with an open outcome, in which the fundamental status of the pursued "phenomena" is unclear, sightings are rare (although not singular), and the existing state of knowledge is unclear and ambiguous. In this point, such investigations resemble RSPK investigations. Due to the extremely unfavorable initial situation in terms of research logic, this area is strongly influenced by lay scientific actors. This applies in a comparable way to crop circle research and—in some aspects—also to RSPK research (ghost-hunting groups).

A further aspect must be added at this point: The materiality of the objects under investigation includes the *forgery possibility*. This has become particularly relevant in crop circle research, as a "crop circle maker" scene has developed.[9] While RSPK phenomena manifest themselves either as phenomena (apparitions) or often as unspecific effects on physical objects (e. g. measuring instruments, data carriers, but also objects that move in an allegedly unexplainable manner)—effects that are highly ambiguous and/or elusive—the crop circles are semi-permanent objects that are intersubjectively perceivable over a longer period, and have a material status that can be well investigated. The existence of crop circles as such is not at issue, but the explanation for their cause. At the end of an investigation there can only be a consideration of the plausibility of competing interpretation models on the basis of all available data—in the ideal case with one of the following results: forgery, (un)common orthodox explanation, or anomaly. Such a situation only arises in the rarest of cases in RSPK investigations—such as in the "Remarkable Photographic Anomaly" case, in which the existence of an exceptional extra on a picture likewise was not at issue, and the case of the "Bélmez faces", both presented in this volume. Often enough, the result will be of a forth kind: The case must remain undecided due to unclear and insufficient data.

9 Because the "crop circle makers" do not usually sign their works, i. e. indicate their authorship, the designation "crop circle forgers" would be more apt. To some extent, such artificially produced pseudo-anomalies can be found in the UFO scene as well.

References

Arment, C. (2004). *Cryptozoology: Science & speculation*. Landisville, PA: Choachwhip.

Bader, C. D., Mencken, F. C., & Baker, J. O. (2010). P*aranormal America: Ghost encounters, UFO sightings, Bigfoot hunts, and other curiosities in religion and culture*. New York, NY: New York University Press.

Haselhoff, E. H. (2015). Kornkreise. In G. Mayer, M. Schetsche, I. Schmied-Knittel, & D. Vaitl (Eds.), *An den Grenzen der Erkenntnis: Handbuch der wissenschaftlichen Anomalistik* (pp. 384–401). Stuttgart: Schattauer.

Hoos, H. (2004). Zu den Hintergründen des Kornkreisphänomens und der Kornkreisforschung. *Zeitschrift für Anomalistik, 4*, 102–144.

Hövelmann, G. H. (2015). On the Usefulness of Parapsychology for Science at Large. In E. Cardeña, J. Palmer, & D. Marcusson-Clavertz (Eds.), *Parapsychology: A handbook for the 21st century* (pp. 389–398). Jefferson, NC: McFarland & Company, Inc., Publishers.

Mayer, G., & Schetsche, M. (2016). On anomalistics research: The paradigm of reflexive anomalistics. *Journal of Scientific Exploration, 30*, 374–397.

Müller, A. (2001). *Kornkreise: Geometrie, Phänomene, Forschung*. Aarau: AT Verlag.

Thomas, A. (2002). *Vital signs: A complete guide to the crop circle mystery and why it is not a hoax*. Berkeley, CA: Frog, Ltd.

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